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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/654,462

DATE: 03/05/2002

TIME: 13:46:06

Input Set : A:\PTO.VSK.txt

Output Set: N:\CRF3\03052002\I654462.raw

3 &lt;110&gt; APPLICANT: Jessell, Thomas M.

4       Briscoe, James

5       Rubenstein, John L.R.

6       Sander, Maïke

8 <120> TITLE OF INVENTION: GENETIC DEMONSTRATION OF REQUIREMENT FOR NKX6.1 AND NKX2.2  
IN VENTRAL

9       NEURAON GENERATION

11 &lt;130&gt; FILE REFERENCE: 0575-62166

13 &lt;140&gt; CURRENT APPLICATION NUMBER: 09/654,462

14 &lt;141&gt; CURRENT FILING DATE: 2000-09-01

16 &lt;160&gt; NUMBER OF SEQ ID NOS: 4

18 &lt;170&gt; SOFTWARE: PatentIn version 3.1

20 &lt;210&gt; SEQ ID NO: 1

21 &lt;211&gt; LENGTH: 367

22 &lt;212&gt; TYPE: PRT

23 &lt;213&gt; ORGANISM: Human

25 &lt;400&gt; SEQUENCE: 1

27 Met Leu Ala Val Gly Ala Met Glu Gly Thr Arg Gln Ser Ala Phe Leu

28 1                               5                               10                               15

31 Leu Ser Ser Pro Pro Leu Ala Ala Leu His Ser Met Ala Glu Met Lys

32                               20                               25                               30

35 Thr Pro Leu Tyr Pro Ala Ala Tyr Pro Pro Leu Pro Ala Gly Pro Pro

36                               35                               40                               45

39 Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Pro Ser Pro Pro Leu

40                               50                               55                               60

43 Gly Thr His Asn Pro Gly Gly Leu Lys Pro Pro Ala Thr Gly Gly Leu

44 65                               70                               75                               80

47 Ser Ser Leu Gly Ser Pro Pro Gln Gln Leu Ser Ala Ala Thr Pro His

48                               85                               90                               95

51 Gly Ile Asn Asn Ile Leu Ser Arg Pro Ser Met Pro Val Ala Ser Gly

52                               100                               105                               110

55 Ala Ala Leu Pro Ser Ala Ser Pro Ser Gly Ser Ser Ser Ser Ser

56                               115                               120                               125

59 Ser Ser Ala Ser Ala Ser Ser Ala Ser Ala Ala Ala Ala Ala Ala

60                               130                               135                               140

63 Ala Ala Ala Ala Ala Ala Ser Ser Pro Ala Gly Leu Leu Ala Gly Leu

64 145                               150                               155                               160

67 Pro Arg Phe Ser Ser Leu Ser Pro Pro Pro Pro Pro Pro Gly Leu Tyr

68                               165                               170                               175

71 Phe Ser Pro Ser Ala Ala Ala Val Ala Ala Val Gly Arg Tyr Pro Lys

72                               180                               185                               190

75 Pro Leu Ala Glu Leu Pro Gly Arg Thr Pro Ile Phe Trp Pro Gly Val

76                               195                               200                               205

79 Met Gln Ser Pro Pro Trp Arg Asp Ala Arg Leu Ala Cys Thr Pro His

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80      210      215      220
83 Gln Gly Ser Ile Leu Leu Asp Lys Asp Gly Lys Arg Lys His Thr Arg
84 225      230      235      240
87 Pro Thr Phe Ser Gly Gln Gln Ile Phe Ala Leu Glu Lys Thr Phe Glu
88      245      250      255
91 Gln Thr Lys Tyr Leu Ala Gly Pro Glu Arg Ala Arg Leu Ala Tyr Ser
92      260      265      270
95 Leu Gly Met Thr Glu Ser Gln Val Lys Val Trp Phe Gln Asn Arg Arg
96      275      280      285
99 Thr Lys Trp Arg Lys Lys His Ala Ala Glu Met Ala Thr Ala Lys Lys
100      290      295      300
103 Lys Gln Asp Ser Glu Thr Glu Arg Leu Lys Gly Ala Ser Glu Asn Glu
104 305      310      315      320
107 Glu Glu Asp Asp Asp Tyr Asn Lys Pro Leu Asp Pro Asn Ser Asp Asp
108      325      330      335
111 Glu Lys Ile Thr Gln Leu Leu Lys Lys His Lys Ser Ser Ser Gly Gly
112      340      345      350
115 Gly Gly Gly Leu Leu Leu His Ala Ser Glu Pro Glu Ser Ser Ser
116      355      360      365

```

119 &lt;210&gt; SEQ ID NO: 2

120 &lt;211&gt; LENGTH: 682

121 &lt;212&gt; TYPE: DNA

122 &lt;213&gt; ORGANISM: Human

124 &lt;400&gt; SEQUENCE: 2

```

125 cgtgggatgt tagcgggtggg ggcaatggag ggcacccggc agagcgcatt cctgctcagc      60
127 agccctcccc tggcggccct gcacagcatg gccgagatga agaccccgct gtaccctgcc      120
129 gcgtatcccc cgtgctctgc cggccccccc tctctctcgt cctcgtcgtc gtctctctcg      180
131 tcgcccctccc cgcctctggg caccacacaac ccaggcggcc tgaagccccc ggccacgggg      240
133 gggtctctcat cctcgggcag cccccgcag cagctctcgg ccgccacccc acacggcatc      300
135 aacaatatcc tgagccggcc ctccatgcc gtggcctcgg gggccggcct gccctccgcc      360
137 tcgcccctccg gttctctctc ctctctctcc tcgtccgcct ctgcctctct cgcctctgcc      420
139 gccgcgcggg ctgctgcgcg gccgcagcc gccgcctcat ccccgggcgg gctgctggcc      480
141 ggaactgccac gcttttagcag cctgagcccg ccgcccgcgc cggccggggt ctacttcagc      540
143 cccagcgcgc cggccgtggc cggcgtgggc cggtaaccca agccgctggc tgagctgcct      600
145 ggcgggacgc ccattctctg gcccgagtg atgcagagcc cggcctggag ggacgcacgc      660
147 ctggcctgta cccctcgtga gt                                     682

```

150 &lt;210&gt; SEQ ID NO: 3

151 &lt;211&gt; LENGTH: 185

152 &lt;212&gt; TYPE: DNA

153 &lt;213&gt; ORGANISM: Human

155 &lt;400&gt; SEQUENCE: 3

```

156 tcacagatca aggatccatt ttgttggaca aagacgggaa gagaaaacac acgagaccca      60
158 ctttttccgg acagcagatc ttccgcttgg agaagacttt cgaacaaaca aaatacttgg      120
160 cggggcccca gagggctcgt ttggcctatt cgttggggat gacagagagt caggtcaagg      180
162 tgagt                                     185

```

165 &lt;210&gt; SEQ ID NO: 4

166 &lt;211&gt; LENGTH: 273

167 &lt;212&gt; TYPE: DNA

168 &lt;213&gt; ORGANISM: Human

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170 &lt;400&gt; SEQUENCE: 4

171	cctcaggtct ggttcagaa ccgccggacc aagtggagga agaagcacgc tgccgagatg	60
173	gccacggcca agaagaagca ggactcggag acagagcgcc tcaagggggc ctccgagaaac	120
175	gaggaagagg acgacgacta caataagcct ctggatccca actcggacga cgagaaaatc	180
177	acgcagctgt tgaagaagca caagtccagc agcggcggcg ggggcggcct cctactgcac	240
179	gcgtccgagc cggagagctc atcctgaacg ccg	273

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/654,462

DATE: 03/05/2002

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